AMENDMENTS TO THE CLAIMS

Listing of Claims:

1.-3.   (Canceled).

4.   (Currently Amended) A method for identification of an object having an object surface, said method comprising:

illuminating a digital micro-mirror arrangement via a light source;

successively projecting a number of encoded illumination patterns by driving said digital micro-mirror arrangement to sequentially illuminate said object surface, with the digital micro-mirror arrangement being sequentially illuminated with at least three colors in a beam path through a variable color filter onto said object surface for identification of at least three depth planes of said object in a single image;

registering said image of said object with a color camera from a direction different from said beam path; and

determining a three-dimensional image of a topography of said object surface from said registration in a control and evaluation unit, the determining including the use of at least triangulation principles; and

~~evaluating the three-dimensional image and a two-dimensional image of said object;~~

~~wherein said encoded illumination patterns include a stripe pattern for each of the at least three colors, and the stripe patterns have different periodicity in a video frame.~~

5.   (Previously Presented) The method according to claim 4, wherein said encoded illumination patterns comprise a stripe pattern having successively varied periodicity.

6.   (Previously Presented) The method according to claim 4, wherein said method is used for face identification.

7.   (Cancelled)

8.   (New) The method according to claim 4, wherein the determining a three-dimensional image includes comparing said image of said object with pre-stored data.

9.   (New) The method according to claim 4, wherein the determining a three-dimensional image does not require comparing said object surface with a reference surface.

10.   (New) A method for identification of an object having an object surface, said method comprising:

illuminating a digital micro-mirror arrangement via a light source;

successively projecting a number of encoded illumination patterns by driving said digital micro-mirror arrangement to sequentially illuminate said object surface, with the digital micro-mirror arrangement being sequentially illuminated with at least three colors in a beam path through a variable color filter onto said object surface for identification of at least three depth planes of said object in a single image;

registering said image of said object with a single color camera from a direction different from said beam path, the single color camera always registering a same perspective of said object; and

determining a three-dimensional image of a topography of said object surface from said registration in a control and evaluation unit, the determining including the use of at least triangulation principles.

11.   (New) A system for identification of an object having an object surface, said system comprising:

a light source configured to illuminate a digital micro-mirror arrangement;

a control unit configured to control unit configured to control the digital micro-mirror arrangement;

the digital micro-mirror arrangement being configured to successively project a number of encoded illumination patterns to sequentially illuminate said object surface, the digital micro-mirror arrangement being sequentially illuminated with at least three colors in a beam path through a variable color filter onto said object surface for identification of at least three depth planes of said object in a single image;

a single color camera arranged to having a same perspective of said object surface and configured to register said image of said object from a direction different from said beam path; and

an evaluation unit configured to determine a three-dimensional image of a topography of said object surface from said image registered by the single color camera using triangulation principles.

12.   (New) The system according to claim 11, wherein said encoded illumination patterns include a stripe pattern having successively varied periodicity.

13.   (New) The system according to claim 11, wherein said system is used for face identification.